OHC 32, 46, 68, 100, 150, 220

ANTI-WEAR HYDRAULIC OIL

PRODUCT DATA SHEET & MSDS



DESCRIPTION

Blue Chip OHC is a high quality anti-wear hydraulic oil formulated with highly refined base oils and a proven additive system to meet the requirements of stationary and mobile hydraulic systems. Designed to provide outstanding pump and component life, system cleanliness, oxidation stability, demulsibility and protection against rust and corrosion.

PRODUCT FEATURES

- Excellent oxidation stability extends oil drain intervals
- Excellent filterability and consequently less downtime
- Improved protection of critical components with tight tolerances
- Superior wear protection for maximum equipment life
- Outstanding protection against rust and corrosion
- Excellent hydrolytic stability for improved protection and extended life of yellow metal components

APPLICATION

Blue Chip OHC hydraulic oils are designed for stationary and mobile hydraulic systems where anti-wear oils are recommended. Can be used in hydraulic systems with vane, gear and piston pumps. Particularly suitable for use in pump bearings, vacuum pumps and sealing glands. Also suitable for lightly loaded gears, plain and rolling element bearings, white metal bearings, industrial torque converters, crushers and machine tools where anti-wear type oils are specified.

TYPICAL PROPERTIES

PROPERTY	UNITS	OHC 32	OHC 46	OHC 68	OHC 100	OHC 150	0HC 220	ASTM TEST
Viscosity at 40 °C	cSt	32	46	68	100	150	220	D445
Viscosity at 100 °C	cSt	5.4	6.84	8.9	11.4	14.9	19.5	D445
Viscosity Index		102	103	104	102	100	100	D2270
Density at 20°C	Kg/l	0.868	0.872	0.875	0.882	0.886	0.889	D4052
Flash Point COC	°C	220	233	247	254	256	260	D92
Pour Point	°C	-9	-9	-9	-7	-5	-4	D97
Rust Test (24hrs)		Pass	Pass	Pass	Pass	Pass	Pass	D665

PERFORMANCE LEVEL

- Parker (formerly Denison) HF-0, HF-1, HF-2 (HM, HV)
- Eaton M-2950-S and I-286-S3
- MAG P68, P69, P70 (HM, HV)
- DIN 51524-2 (HM); DIN 51524-3 (HV)
- ISO 11158 (HM, HV)
- Bosch Rexroth RE 90220
- SEB 181222
- ASTM D6158 (HM, HV)
- SAE MS 1004 (HM, HV)
- JCMAS P041 HK Hydraulic specification
- ANSI/AGMA 9005-E02-RO
- GM LS-2
- AIST 126, 127

All reasonable care has been taken to ensure that the information contained in this publication is accurate at the date of printing. It should be noted however that the information may be effected by changes subsequent to the date of printing in the blend formulation or methods of application of any of the products referred to or in the requirements of any specification approval relating to any such products.

Revision Date : 4 October 2022 (Third Revision)

licensed manufacturer

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1. PRODUCT IDENTIFICATION

Product	:	Circulating Hydraulic Oil
Company Identification	:	OHC 10W, 32, 46, 68, 100
Substance / Preparation	:	Preparation
Product Use	:	Modern high pressure hydraulic pumps and systems.

2. COMPOSITION

Chemical Composition	:	Base Oils and Additives
Hazardous Components	:	No component is present at sufficient concentration to require a hazardous classification.

3. HAZARDS IDENTIFICATION

Hazards	:	This material is not considered to be hazardous, but should be handled in accordance with good industrial hygiene and safety practices.

4. FIRST AID MEASURES

Eye Contact	:	Flush eyes thoroughly with water. Obtain medical advice if any irritation occurs.
Skin Contact	:	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin thoroughly. If irritation persists obtain medical attention.
Ingestion	:	Not expected to be a problem. If large quantities of this product are ingested obtain medical advice. DO NOT induce vomiting unless directed so by medical personnel. Never give anything by mouth to an unconscious person.
Inhalation	:	Avoid excessive inhalation of mists, fumes or vapour. This causes irritation to the nose, throat, and coughing. Remove person from exposure. If symptoms persist obtain medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing media	:	In case of fire use water sprays, fog or standard foam is recommended. DO NOT USE water jets. Water may be used to cool nearby heat exposed areas /objects. Avoid spraying directly into storage containers because of the danger of boil-over. Move container away from fire area if you can do it without risk.
Special hazards	:	Fires in confined areas should be dealt with by trained personnel wearing approved breathing apparatus. Toxic fumes may be evolved on burning or exposure to heat.
Protective clothing	:	Use suitable protective breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Any spillages should be regarded as a potential fire risk. In the event of spillage, remove all sources of ignition and ensure good ventilation. Spilled material may make surface slippery. Clean up spilled material immediately. It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.
Environmental precautions	:	Do not wash product into drainage systems, protect drains from potential spills to minimize contamination. In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover from the surface. Protect environmentally sensitive areas and water supplies. Minimize contact of spilled material with soils to prevent runoff to surface waterways.
Small Spills	:	For small spills clean up the material immediately. Contain and recover spilled material using sand or other suitable inert absorbent material.
Large Spills	:	Recovery of large spills should be affected by specialist personnel.

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7. HANDLING AND STORAGE

Handling precautions	:	Avoid contact with skin and observe good personal hygiene. Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Avoid frequent or prolonged skin contact with fresh or used product. Wash hands thoroughly after contact. Use disposable cloths and discard when soiled. Do not put soiled cloths in pockets. Take necessary precautions against accidental spillage into soil and water. Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.
Storage precautions	:	Store under cover away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:		There is no appropriate occupational exposure limit to this material.
Engineering controls	:	The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.
Personal Protective Equipment		
Respiratory system	:	Respiratory protection is unnecessary, provided the concentration of vapour, mists or fumes is adequately controlled. The use of respiratory equipment must be strictly in accordance with any statutory requirements governing its selection and use.
Hands	:	Use chemical resistant, impervious gloves.
Eyes	:	Safety glasses with side shields. Goggles with a face shield may be necessary depending on conditions of use.
Skin	:	Disposable outer garments where there is the potential for contact with the material.

9. TYPICAL PROPERTIES

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10. STABILITY AND REACTIVITY

Conditions to avoid	:	Sources of ignition. Thermal decomposition products will vary with conditions. Incomplete combustion will generate smoke, carbon dioxide and hazardous gasses, including carbon monoxide.
Incompatible Materials	:	Avoid contact with strong oxidizing agents
Stability	:	Stable at ambient temperatures. Hazardous polymerization reactions will not occur.

11. TOXICOLOGICAL INFORMATION

Skin contact	:	Unlikely to cause harm to the skin on brief or occasional contact.



Eye contact	:	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Ingestion	:	Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea.
Inhalation	:	At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May cause irritation to eyes, nose and throat due to vapour, mists or fumes. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occur.

12. ECOLOGICAL INFORMATION

Aquatic toxicity	:	Spills may form a film on water surfaces causing physical damage to organisms; oxygen transfer could also be impaired.
Biodegradability	:	This product is inherently biodegradable.
Bio-accumulation	:	There is no evidence to suggest bio-accumulation will occur.
Mobility	:	Spillages may penetrate the soil causing ground and water contamination.

13. DISPOSAL CONSIDERATIONS

Disposal Methods	:	Where possible, arrange for the product to be recycled. Dispose via an authorized person / licensed waste disposal conductor in accordance with local regulations.

14. TRANSPORT INFORMATION

Road Transport	:	Not classified as hazardous for transport

15. REGULATORY INFORMATION

EEC hazard classification	:	Not classified

DISCLAIMER

The information provided in this data sheet and the health, safety and environmental information it contains, is correct to the best of our knowledge at the date of publication. However, neither Blue Chip Lubricants (Pty) Ltd nor any of its affiliates, accept any liability whatsoever for the accuracy or completeness of the information contained herein. Since this information may be applied under conditions beyond our control, we do not accept any responsibility for the results of its use. Final determination of suitability of any material is the sole responsibility of the user.